



COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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March 13, 2006
File No: 98-50.1.5B SI

Mr. Jonathan Bishop, Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Dear Mr. Bishop:

Comments on Tentative Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) Permit - County Sanitation Districts of Los Angeles County, Joint Water Pollution Control Plant (NPDES Permit No. CA0053813, CI-1758), Dated February 3, 2006

The Sanitation Districts of Los Angeles County (Districts) appreciate the opportunity to provide comments on the Tentative Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit (Tentative Permit) for the Districts' Joint Water Pollution Control Plant (JWPCP), dated February 3, 2006. The Districts have a number of concerns regarding the Tentative Permit, which are detailed below. We request that the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) revise the Tentative Permit, as discussed herein. We also request that the Regional Board provide the Districts with complete copies of all comment letters on the Tentative Permit received by other parties, a copy of the Regional Board's "Response to Comments," and a copy of the Regional Board's Agenda Package provided to its Board members in advance of the public hearing to adopt the JWPCP permit.

A. Comments Regarding Mass Emission Limitations

Comment 1: Design capacity flows should be the basis for dry weather mass effluent limitations.

Contrary to federal regulations at 40 C.F.R. §122.45(b)(1), the Tentative Permit includes final effluent mass limitations that are based on the 1997 JWPCP permit design flow of 385 mgd, rather than the design flow specified in the Districts' 2001 Report of Waste Discharge of 400 mgd. It is the Districts' understanding that this decision is based on anti-backsliding and anti-degradation concerns. We request that the design flow of 400 mgd be used in the calculation of final effluent mass limitations. Use of the design flow is consistent with anti-backsliding and antidegradation concerns, as detailed below. Anti-backsliding, which has a statutory and regulatory foundation, applies to effluent limits in NPDES permits. Antidegradation, which has a regulatory and state policy foundation, applies to ambient water quality. An analysis of these requirements and how they apply in this instance is provided below.

With regard to anti-backsliding, Section 402(o) of the CWA prohibits a permit from being reissued with less stringent effluent limitations unless certain exceptions prevail such as if "material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the

application of a less stringent effluent limitation”¹ or “Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance.”² The CWA also specifies that in no case can a reissued or modified permit contain less stringent effluent limitations that would violate a water quality standard.³ These same conditions are reflected in the exceptions listed the regulations that preceded the statutory amendments, namely 40 C.F.R. §122.44(l)(i). The State Water Resources Control Board (State Board) has addressed this issue in a precedential order, concluding that the Regional Board must reconsider the need for effluent limitations in light of the anti-backsliding exceptions contained in the Clean Water Act Sections 303(d)(4) and 402(o)(2), including the exception for new information in Section 402(o)(2)(B)(i).⁴

The Districts believe that the changes to treatment and performance at JWPCP satisfy these exceptions. When the NPDES permit was issued in 1997, the JWPCP discharged a blend of primary and secondary treated wastewater, with a dry weather design capacity of 385 mgd. That permit was issued for a five-year term, and was to have expired in 2002, but still remains in effect. As part of a Consent Decree with USEPA Region 9 and the Regional Board [No. 92 0061 RG (JRx)], the Districts were obligated to construct additional secondary treatment facilities and achieve compliance with full secondary treatment at the JWPCP by December 31, 2002. On January 7, 2003, the Districts informed the Regional Board that the JWPCP had achieved full secondary treatment on November 8, 2002. Since the issuance of the 1997 permit, the Districts and Regional Board have had the opportunity to evaluate the capability of the JWPCP in terms of treatment capacity and effluent performance. Information collected since issuance of the 1997 permit indicates that the plant has the ability, on average, to treat 400 mgd of wastewater to meet water quality standards. As such, a legitimate argument can be made by the Regional Board that CWA Sections 402(o)(2)(A) and 402(o)(2)(B)(i) and 40 C.F.R. §122.44(l)(i) are satisfied. This is also confirmed by information in the Tentative Permit Findings and statements in the Fact Sheet that substantial changes have been made to the JWPCP since the 1997 permit was issued, and that new information is available related to the capability of the plant since the 1997 permit was issued. These changes justify the use of 400 mgd in calculating less stringent mass emission effluent limitations than those contained in the 1997 permit and constitute an exception to the general rule against backsliding.

In addition, based on the discussion in Permit Finding II.P, the Regional Board has already allowed for some effluent limitations to be less stringent than those in the previous permit, and has acknowledged that this allowance is consistent with the anti-backsliding requirements of the CWA and federal regulations. Thus, further changes to the mass limits in accordance with anti-backsliding requirements should be equally justifiable.

With regard to antidegradation, the Regional Board has already declared in Section IV.F of the Fact Sheet that the changes at the JWPCP have led to improved water quality: “Although the design flow rate of the treatment plant has increased to 400 mgd, this increase has been accompanied by a significant improvement in the level of effluent treatment necessary to achieve full secondary treatment. As a result, both the quantity of discharged pollutants and quality of the discharge are expected to remain relatively constant or improve during this permit term, consistent with antidegradation policies.” The Districts believe that this statement, made as a specific permit finding, would satisfy CWA Section 402(o)(3) that water quality standards will be met as well as the antidegradation requirements applicable to the permit if the basis for mass limitations is revised to 400 mgd in the tentative permit.

Furthermore, the increase in mass loading under the 400 mgd design flowrate, relative to the 385 mgd design flowrate, would be insignificant, representing an increase of less than four percent. An antidegradation analysis should not be needed at this time to justify the higher design flowrate, because

¹ 33 U.S.C. §1342(o)(2)(A), CWA section 402(o)(2)(A).

² 33 U.S.C. §1342(o)(3), CWA section 402(o)(3).

³ CWA 402(o)(3).

⁴ See County Sanitation Districts of Los Angeles County, Order WQ 2003-0009 (July 16, 2003), p 13.

the insignificant increase does not pose any risk of unreasonable degradation to the marine environment. The Districts believe that it has already been demonstrated that no unreasonable degradation of the marine environment is occurring as a result of the discharge from the JWPCP, based on the May 30, 2003 report submitted to the Regional Board entitled, "A Report on JWPCP Compliance with Clean Water Act §403(c) Ocean Discharge Criteria."

Finally, use of mass limitations based on the 400 mgd design flow will provide the Districts with operational flexibility to route flows within the Joint Outfall System as necessary to perform maintenance and upgrades at the upstream water reclamation facilities on the system. In instances where flows need to be routed to the JWPCP from the upstream facilities, it may be necessary to operate the JWPCP at its 400 mgd capacity for limited periods of time.

Requested Tentative Permit Revisions:

Revise the findings, identified below, as indicated. (Revisions to the findings are delineated by strike-out and underline text.) In addition, revise the Fact Sheet for the Tentative Permit accordingly.

II. Findings

- A. Background.** The County Sanitation Districts of Los Angeles County (hereinafter Discharger or Districts) is currently discharging under Order No. 97-090 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0053813, which was adopted on June 16, 1997. The Discharger submitted a Report of Waste Discharge, dated November 9, 2001, and applied for a NPDES permit renewal to discharge up to 400 million gallons per day (mgd) of secondary treated wastewater from the Joint Water Pollution Control Plant, hereinafter Facility or JWPCP. The application was deemed complete on May 6, 2002. The 400 mgd design capacity represents an increase of 15 mgd from the 1997 NPDES Permit based on treatment upgrades and other improvements at the JWPCP to process additional flow and provide additional treatment.

Joint Outfall System. JWPCP is part of a Joint Outfall System. The Joint Outfall System is an integrated network of collection systems, pumping stations and seven treatment plants consisting of the JWPCP and with six upstream water reclamation plants - La Cañada, Whittier Narrows, San Jose Creek, Pomona, Los Coyotes and Long Beach. It treats municipal and industrial wastewater. The Joint Outfall System is designed to provide flexibility to operate the treatment plants at alternative flow rates to allow for facility maintenance, construction, and optimization of processes. The flow from the six upstream plants can be bypassed, to a limited extent, to JWPCP as needed for efficient operation. The sludge generated from the upstream plants are returned to the joint outfall trunk sewers and conveyed to JWPCP for further treatment. There are approximately five million people in the Joint Outfall System service area. Modifications at the Joint Outfall System facilities can lead to changes in treatment capability or design capacity, such as the changes to the JWPCP since the 1997 NPDES permit with conversion to full secondary treatment.

- O. Antidegradation Policy.** Section 131.12 of 40 C.F.R. requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16, which incorporates the requirements of the federal antidegradation policy. Resolution 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. Although the design flow rate of the treatment plant has increased to 400 mgd, this increase has been accompanied by a significant improvement in the level of effluent treatment necessary to achieve full secondary treatment. As a result, both the quantity of discharged pollutants and quality of the discharge are expected to remain relatively constant or improve during this permit term, consistent with antidegradation policies. As discussed in further detail in the Fact Sheet (Attachment F) the permitted discharge is consistent with the antidegradation provision of 40 C.F.R. 131.12 and State Water Board Resolution 68-16.

P. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 C.F.R. 122.44(l) generally prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. Some effluent limitations in this Order are less stringent than those in the previous Order. Some effluent limitations in this Order have also been revised based on material and substantial alterations or additions to the JWPCP that occurred after the issuance of the 1997 NPDES permit and these changes constitute new information that was not available at the time of the 1997 permit issuance. As discussed in detail in the Fact Sheet (Attachment F) this relaxation of effluent limitations is consistent with the anti-backsliding requirements of the CWA and federal regulations.

IV. Discharge Specifications AND Effluent Limitations

B. Effluent Limitations and Performance Goals

Footnotes for Effluent Limitations and Performance Goals

[1] The daily mass emission calculations are based on the average design flow rate of ~~385~~ 400 million gallons per day (mgd) specified in the ~~1997~~ 2001 Report of Waste Discharge for the Joint Water Pollution Control Plant (JWPCP) ~~permit~~ according to the Ocean Plan equation: $\text{lbs/day} = 0.00834 \times C_e$ (effluent concentration, ug/L) $\times Q$ (flow rate, mgd).

During storm events when flow exceeds the dry weather design capacity, the mass emission rate limits shall not apply. Only the concentration limits shall apply.

Comment 2: The Order should include a reopener to modify the mass emission limitations after an antidegradation analysis.

Notwithstanding our earlier comments on this issue, the Order should include a reopener to modify and recalculate the mass emission limitations, based on the current design capacity of 400 mgd, after the Districts conduct an antidegradation analysis. Order R4-2005-0020 for the Hyperion Treatment Plant includes a reopener for the express purpose of modifying the mass emission rates after the Discharger conducts an antidegradation analysis (page 47, Section VI.B.). The Districts believe that similar language is warranted in this Order.

Requested Tentative Permit Revision:

Add a reopener to read: "This Order and permit may be reopened and modified, to incorporate new mass emission rates based on the current Joint Water Pollution Control Plant's design capacity of 400 mgd provided that the Discharger requests and conducts an antidegradation analysis."

B. Comment Regarding Reasonable Potential

Comment: Limitations for acute and chronic toxicity should be removed.

In Table 1 of Appendix 1, the Regional Board concluded that the JWPCP final effluent does not have a statistical basis for acute or chronic toxicity limitations based on reasonable potential (RP). However, acute and chronic toxicity limits were maintained for Discharge Serial Nos. 001 and 002 and chronic toxicity limitations were added for Discharge Serial Nos. 003 and 004 citing best professional judgment (BPJ). There is no clear explanation of why and how BPJ was used in determining that chronic toxicity limits were necessary, but an explanation for the acute limit (as applied to Discharge Serial Nos. 001 and 002) is provided in Attachment F (Section IV.C.6, page F-22). This section cites guidance from the California Ocean Plan (Ocean Plan), a lack of toxicity data using marine species, the presence of ammonia and chlorine prior to discharge, and the need for a "backstop" to prevent "toxic pollutants in

toxic amounts” as the rationale for the acute limit. The Districts would like to address these issues and demonstrate that there is no justification for toxicity limitations in the JWPCP permit.

The Ocean Plan provides guidance on the types of toxicity tests required based upon the dilution of the discharge (2005 Ocean Plan, page 14). According to this guidance, chronic toxicity testing is required for discharges with minimum initial dilutions between 100:1 and 350:1. Acute toxicity testing is optional for discharges with dilution in this range and left to the discretion of the Regional Board. The Regional Board is not obligated to include acute toxicity tests as part of the NPDES permit. However, even if this optional testing requirement is required in a permit, there is no requirement to impose an acute limit. Given that the Ocean Plan does not require acute toxicity testing, the Regional Board must have chosen to impose an acute toxicity limit based on the other factors listed in Attachment F: the lack of toxicity data using marine species; the presence of ammonia and chlorine in the JWPCP effluent; and the need for a toxic pollutant “backstop.” These issues are addressed below individually. The Districts believe this discussion provides sufficient evidence to eliminate these concerns as a basis for an acute toxicity limit.

In anticipation of revisions included in the 2005 version of the Ocean Plan, and potential questions regarding acute toxicity, the Districts conducted acute toxicity tests using marine species. Between June of 2003 and October of 2005, acute tests were conducted using vertebrate (Topsmelt) and invertebrate (*Mysidopsis bahia*) test organisms. These bioassays were performed in accordance with the current NPDES testing requirements and meet all QA/QC standards. These data were provided to the Regional Board staff on February 22, 2006, and detailed reports for each test can be provided upon request. An RP analysis of these data confirms that JWPCP final effluent has no reasonable potential to cause acute toxicity under the 2005 Ocean Plan acute toxicity provisions (Figure 1). Therefore, based on the toxicity data using marine species, a limit on acute toxicity is not justified based upon the RP analysis.

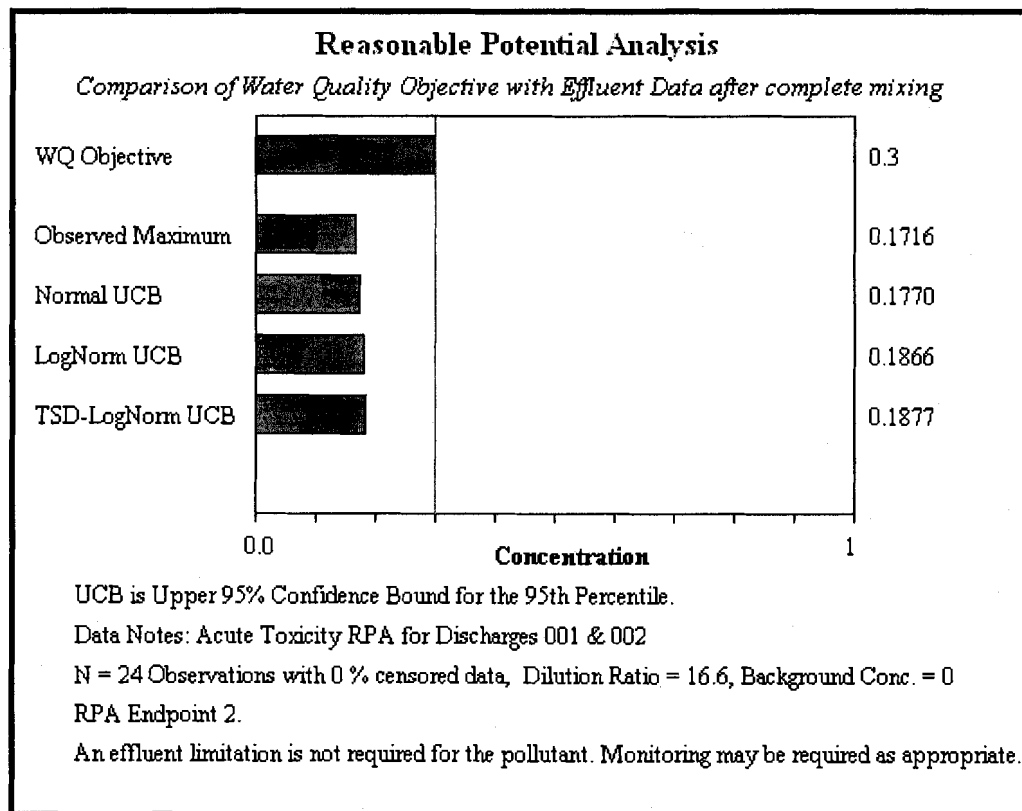


Figure 1. Acute toxicity RP analysis of JWPCP final effluent according to 2005 Ocean Plan provisions

In terms of the ammonia and chlorine in JWPCP effluent, these compounds pose very little risk as a source of acute toxicity at the concentrations found in the effluent from JWPCP, particularly after the minimum initial dilution. In the case of chlorine, effluent limitations have been placed in the permit to address the effects of chlorine in the discharge. Ammonia is present in the JWPCP effluent at very consistent concentrations (30-40 parts per million (ppm)), but is highly diluted once it is discharged. Using the acute dilution credit, the typical concentration of ammonia at the edge of the acute mixing zone is 1.8 – 2.4 ppm, well below the Ocean Plan acute limit of 6 ppm. Furthermore, if ammonia toxicity was a problem, the Districts would have seen acute toxicity in our routine monitoring data or special study data using the new Ocean Plan requirements and this toxicity would have resulted in a finding of RP. However, our RP analysis of historical monitoring data, and the more applicable marine species data presented in Figure 1, provides direct evidence that ammonia toxicity is consistently absent from the discharge. Additionally, the tentative permit includes a reopener provision, which states “[t]his Order may be reopened and modified, to incorporate new limits based on future reasonable potential analysis to be conducted based on on-going monitoring data collected by the Discharger and evaluated by the Regional Water Board and USEPA.” The inclusion of this requirement will result in the addition of future effluent limitations should monitoring data demonstrate a need which does not currently exist.

The Districts are aware that the Regional Board included acute toxicity effluent limitations in the NPDES permit (reference Order No. R4-2005-0020) for the Hyperion WWTP. However, it should be noted that there is a material difference between historical acute toxicity results for Hyperion WWTP effluent and JWPCP effluent. Specifically, acute toxicity in Hyperion WWTP effluent has historically been identified as stated in Finding No. 56 of their NPDES permit: “[b]ecause ammonia and marine acute toxicity effluent quality data for POTW ocean discharges having dilution ratios greater than 84:1 periodically show acute toxicity related to effluent ammonia concentrations and the current operation of the Hyperion Treatment Plant does not effectively remove ammonia, the Regional Board and USEPA have determined that the Hyperion discharge has reasonable potential to exceed the current Ocean Plan objective for acute toxicity.” As previously mentioned, unlike the Hyperion WWTP, acute toxicity has not been detected in JWPCP effluent, consequently no reasonable potential exists and no limit is required. If the Regional Board persists in maintaining an acute toxicity limit, an analysis must be performed under Water Code section 13263 prior to adoption of this limit.

Finally, using the acute toxicity limit as a toxicity backstop is redundant since the permit already requires chronic toxicity testing. Chronic toxicity testing in combination with Toxicity Reduction Evaluation requirements are a more effective backstop because chronic toxicity tests are more sensitive to the long-term effects of potential toxicants in wastewater. The imposition of an acute toxicity limit for this purpose, particularly in light of the lack of any reasonable potential to cause acute toxicity, is redundant, unnecessary, and ineffective.

The Districts have long supported the use of chronic toxicity tests in NPDES permits as a tool to assimilate the combined effect and complex interactions of all toxicants in a wastewater effluent. We also fully support the use of accelerated monitoring and TRE triggers in response to toxicity. However, the demonstrated lack of RP for acute and chronic toxicity in this discharge clearly indicate that toxicity limits are not warranted. Further, the BPJ arguments used to justify the acute limit are unfounded and/or already covered by other permit requirements. Finally, any assertion that the toxicity requirements in the JWPCP permit should be consistent with the recently adopted Hyperion NPDES permit would fail to recognize significant differences between the toxicity of the two discharges and availability of relevant toxicity data. Since the JWPCP discharge has not been toxic and has shown no reasonable potential to be toxic, the Districts request the removal of acute and chronic toxicity limitations from the Tentative Order. In the alternative, the Districts support the conversion of these limitations to performance goals.

Requested Tentative Permit Revision:

Replace acute and/or chronic toxicity limits on pages 14, 18, and 19 of the Tentative Order with Footnote 10 (found on page 21 of the Tentative Order). Move numeric limits from the “Effluent

Limitations" column to the "Performance Goals" column of each respective table. Replace the word "limitation" with "performance goal" whenever used in relation to toxicity testing throughout the Order, MRP, and Fact Sheet. Remove acute and/or chronic toxicity from the list of constituents with Reasonable Potential in Section IV.C.4 of the Fact Sheet. Also delete Section IV.C.6 on page F-22 of the Fact Sheet.

C. Comments Regarding Whole Effluent Toxicity (WET) Provisions

Comment 1: Acute toxicity testing is not required according to the Ocean Plan.

The 2005 Ocean Plan only requires acute testing when the minimum initial dilution (MID) is greater than 1000:1. The Ocean Plan states that at minimum initial dilutions (MIDs) between 100:1 and 350:1 chronic testing is required, but acute testing may be required "as necessary for the protection of beneficial uses of ocean waters" (reference pg 13, 2005 Ocean Plan). All ocean discharge permits should follow the Ocean Plan requirements and only require acute toxicity testing when previous acute testing indicates that there is reasonable potential for acute toxicity.

Requested Tentative Permit Revision:

The Districts request that the requirement for acute toxicity testing be deleted in its entirety.

Comment 2: Frequency of acute and chronic toxicity tests should be reduced.

Guidance issued by Region 9 of the United States Environmental Protection Agency (USEPA) and draft guidance issued by USEPA headquarters on the implementation of WET programs support the reduction in monitoring frequency under certain conditions. Draft national USEPA guidance (November, 2004) supports a reduction in testing frequency for discharges with a substantial record of compliance. Additionally, according to USEPA Region 9 & 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs (May, 1996)⁵, monthly testing is suggested only when no previous data are available, and recommends that test frequency be reduced if the monthly data show no reasonable potential for toxicity (page 2-28). The Districts have conducted monthly acute and chronic toxicity tests for over fifteen years. Based upon this extensive dataset, the Regional Board concluded that JWPCP final effluent does not have reasonable potential to cause acute or chronic toxicity at any of the outfalls (Discharge Serial Nos. 001, 002, 003, and 004). The Districts have also demonstrated a lack of reasonable potential for acute toxicity using marine species consistent with the 2005 Ocean Plan requirements, as previously described. Therefore, the imposition of monthly acute and chronic testing in this permit is inconsistent with available implementation guidance. The Districts believe that the accelerated toxicity monitoring and subsequent Toxicity Reduction Evaluation (TRE) triggers ensure a thorough response to any toxic sample and is consistent with the intent of all applicable regulations and guidance. In addition to our previous request that toxicity limits be removed or, instead, included as performance goals in the NPDES permit, the Districts request that the toxicity testing frequency in the Tentative Permit be reduced from monthly to quarterly as there is no basis for more frequent monitoring.

Requested Tentative Permit Revision:

Reduce frequency of chronic toxicity testing from monthly to quarterly. If acute toxicity testing continues to be required (see Comment C.1), reduce its frequency from monthly to quarterly.

Comment 3: Requirements for chronic toxicity test methods should be consistent with those in the Ocean Plan.

⁵ All referenced documents are hereby incorporated by reference and should be included in the administrative record for this permit. If the Regional Board does not have copies of the referenced documents, the Districts can provide copies upon request.

The Tentative Permit specifies exclusive use of the USEPA West Coast Marine Chronic methods. This is inconsistent with the Ocean Plan and does not recognize the practical constraints of test organism availability. The Ocean Plan establishes two tiers of test methods in response to this issue. First tier methods use West Coast species while second tier assays utilize East Coast species that are lab-cultured by multiple suppliers and available year-round. Table III-1 of the 2005 Ocean Plan includes the following note, "The first tier test methods are the preferred toxicity tests for compliance monitoring. A Regional Board can approve the use of a second tier test method for waste discharges if first tier organisms are not available."

The Districts agree with the preferential use of West Coast species for chronic toxicity testing. However, there are some practical constraints with these methods that require more flexibility in the choice of marine chronic test methods. Many of the test organisms are wild-caught and their availability can be limited due to seasonality or bad weather. Other test species, such as Topsmelt larvae, are occasionally unavailable for extended periods of time. The requirement to use species that may not be available places the Districts in jeopardy of violating the permit by failing to meet monitoring and/or accelerated testing initiation requirements without a route to compliance. Therefore, the Districts request that the first sentence of Section V.B.1 on page E-22 of the Tentative MRP be revised to read: "The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite effluent samples in accordance with the method selection requirements contained in the 2005 California Ocean Plan."

Requested Tentative Permit Revision:

Revise the first sentence of Section V.B.1 on page E-22 of the Tentative MRP to read: "The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite effluent samples in accordance with the method selection requirements contained in the 2005 California Ocean Plan."

Comment 4: The permit should follow USEPA's recommendations and specifically require the use of point estimates for analyzing toxicity test data.

The use of hypothesis testing to analyze chronic toxicity tests is not specifically required in the permit, but the requirement to evaluate the pMSD limits and the subsequent discussion of five possible compliance outcomes (Tentative MRP page E-23, Sections V.C.4 and V.C.5) suggests that hypothesis tests are expected to be used.⁶ The problems associated with the use of hypothesis tests for toxicity compliance determination in the NPDES program have been well documented and recognized by USEPA. Hypothesis tests result in an inconsistent definition of toxicity between tests and laboratories, statistically invalid results (even following conversion to TUs) for reasonable potential determination and multiple test averaging, and an inherent disincentive to minimize within test variability. When effect based statistics, such as point estimation, are used to express toxicity results, all of these problems are alleviated and only two possible compliance outcomes are possible, pass or fail.

For these reasons, USEPA has consistently recommended the use of point estimates (e.g., IC25) rather than hypothesis tests to analyze whole effluent toxicity data since the issuance of the "Technical Support Document for Water Quality-based Toxics Control" (TSD; EPA/505/2-90/001, page 6) in 1991. In the TSD, the USEPA discusses the relative merits and limitations of both techniques and concludes, "comparisons of both types of data indicate that an NOEC derived using an IC25 is approximately the analogue of an NOEC derived using hypothesis testing. For the above reasons, if possible, the IC25 is the preferred statistical method for determining the NOEC." In subsequent method protocols and rule-making, USEPA has continued to voice their preference of point estimates for the analysis of toxicity data. For example, in the final rule (Federal Register Vol. 67, No. 223; Tuesday, November 19, 2002) the

⁶ The table referenced in the Tentative Permit for the pMSD limits only contains one endpoint (survival) from one West Coast method (*Holmesimysis*). In fact, every West Coast method already has pMSD test acceptability criteria incorporated into the method, which MUST be met for a valid test. Therefore, the reference to Table 3.6 in the Variability Guidance Document and the subsequent five compliance outcomes are not required (one can not report tests which do not meet the pMSD limits in the method) and should be stricken from all ocean discharge permits regardless of whether hypothesis tests or point estimates are used.

USEPA confirms that “as previously stated in the method manuals (USEPA, 1993; USEPA 1994a; USEPA 1994b) and the USEPA’s Technical Support Document (USEPA 1991), USEPA recommends the use of point estimation techniques over hypothesis testing approaches for calculating endpoints for effluent toxicity tests under the NPDES Permitting Program” (<http://www.epa.gov/fedrgstr/EPA-WATER/2002/November/Day-19/w29072.pdf>, pg. 69958). Following promulgation of the rule, new method manuals were issued which, again, recommend the use of point estimate procedures rather than hypothesis tests. Specifically, the newest USEPA marine chronic toxicity test methods manual discusses the choice of statistical analysis and states “**NOTE: For the NPDES Permit Program, the point estimation techniques are the preferred statistical methods in calculating end points for effluent toxicity tests**” (<http://www.epa.gov/WET/disk1/ctm.pdf>, pg. 44). The bolded text actually appears in bold in the manual. Identical language and emphasis appears in the newest USEPA freshwater chronic toxicity test methods (<http://www.epa.gov/WET/disk3/ctf.pdf>, pg. 41).

Despite these very strong recommendations from USEPA, it appears that the intent of the Regional Board is to require hypothesis testing to determine compliance with the toxicity limitations in the Tentative Order. The Ocean Plan does not specifically require the use of hypothesis tests to determine the NOEL for chronic toxicity tests, but defines the NOEL as “the maximum percent effluent or receiving water that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test as listed in Appendix II.” The methods listed in Appendix II allow the use of either hypothesis tests OR point-estimates to measure toxicity. Given the problems with hypothesis testing, and the guidance from USEPA, the Tentative Order should specifically require the use of point-estimates to measure acute (LC50) and chronic toxicity (IC25).

Requested Tentative Permit Revision:

Specifically require the use of point-estimates by defining the NOEC in footnote 24 on page 22 of the Tentative Order as follows: “NOEC is expressed as the EC/IC25 as determined by the result of a critical life stage toxicity test using point estimate techniques described in the approved protocols.” The same NOEC definition should be included on Page 22 of Attachment E, in the Chronic Toxicity Testing section.

Comment 5: PMSD test interpretation requirements are inapplicable and unnecessary.

The Tentative Permit requires use of Table 3-6 in *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the NPDES Program* (USEPA/833-R-00-003, June 2000) to qualify results of the WET tests using calculated pMSD. However, the pMSD parameters in this document only apply to one of the ten West Coast marine species. Furthermore, the West Coast methods have test acceptability criteria based upon the pMSD, which must be met for a test to be valid, and are therefore more stringent than those found in the referenced guidance document. The use of the referenced document also conflicts with the pMSD evaluation criteria contained within the promulgated East Coast methods allowed for testing by the Ocean Plan when West Coast methods are unavailable. The referenced guidance document values were not based on data from the USEPA interlaboratory study that were used to develop the pMSD criteria in the promulgation of the East Coast methods. Finally, the idea that a toxicity test result can take one of five different forms as suggested in this section is baseless. When it comes to compliance determination, a result either passes or it fails. Therefore, this section of the permit is erroneous, largely irrelevant, and unnecessary. The Districts request that Section V.C.5 on page E-23 of the MRP be deleted from the permit since pMSD criteria are already required as a part of normal QA/QC procedures for these methods and this section unnecessarily confuses the issue regarding toxicity test result interpretation and compliance determination.

Requested Tentative Permit Revision:

Delete Section V.C.5 on page E-23 of the MRP.

D. Comment Regarding Use of Pesticides within the Area Tributary to the JWPCP

Comment: The exclusion of any product registered under FIFRA would unnecessarily require a prohibition on the use of many household pesticides, and would also restrict the Districts' ability to minimize wastewater overflows through the use of chemical root control products.

Section VI.A.2.t. on page 28 of the Tentative Permit prohibits "the discharge of any product registered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) to any waste stream which may ultimately be released to waters of the United States, unless specifically authorized in this permit or another NPDES permit." It further notes that, "[t]his requirement is not applicable to products used for lawn and agricultural purposes." Because the JWPCP effluent is released to waters of the United States, this requirement could reasonably be interpreted to prohibit the use of any pesticide that could enter sewers tributary to JWPCP. While the Districts strongly support efforts to minimize discharges of pesticides to sewers, this requirement is unnecessarily prescriptive and overly broad. There is no evidence to indicate that this requirement is necessary to protect established beneficial uses.

FIFRA regulates the sale and use of pesticides, which are defined as "any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest." Pesticides include insecticides, herbicides, rodenticides, fungicides, antimicrobials, and insect repellents. Normal use of many of these pesticides could result in the pesticides entering sewers. Examples include application of root control agents to sewers to prevent sewer blockages, application of insecticides to sewer manhole crowns to control cockroaches, application of insecticides to drains in restaurants to control cockroaches, use of insect repellents such as DEET (N, N-diethyl-meta-toluamide), and laundering of clothing impregnated with permethrin. Pesticides may also reach sewers through less direct pathways, such as rinsing of application equipment and rinsing of counters and floors that have been treated with pesticides.

The Districts do not have the authority to prohibit all use of FIFRA-registered pesticides within its service area; such authority is retained by the State of California or federal government. Therefore, if this requirement is retained in the JWPCP permit, the Districts would be placed in the untenable position of being required to take action for which no authority is available, and expose the Districts to unwarranted liability for noncompliance with permit conditions.

Any potential adverse water quality impacts from pesticide usage are adequately addressed by Receiving Water Limitation V.C.4 on page 25, which states that wastes discharged shall not "contain individual pesticides or combinations of pesticides in concentrations that adversely affect beneficial uses." Therefore, the proposed language in Section VI.A.2.t. on page 28 of the Tentative Permit is unnecessary.

Requested Tentative Permit Revision:

Delete Section VI.A.2.t. on page 28 of the Tentative Permit.

E. Comment Regarding Biosolids Management Requirements

Comment: Requiring notice 24 hours prior to a field change is unnecessarily restrictive.

Section IV.B on page 3 of Attachment I of the Tentative Permit requires that the Districts require their "contractors that apply Class B biosolids to notify USEPA Region 9 and the applicable Regional Water Board or State Agency by e-mail, at least 24 hours prior to changing application fields, of the new field to which they will be moving." For Class B land application contractors who change fields frequently, prior notification of field changes is not practical. Sudden weather changes, staff absences, and sudden increases/decreases in hauling of biosolids can affect a contractor's selection of fields and prohibit the contractor from sending advanced notification. This section should be removed as improperly included in an NPDES permit (since these land applications are covered by other regulatory programs), or at least changed to require notice within 72 hours after changing application fields, in order to assure that a sufficient amount of time is given for contractors to submit a notice of field changes. Such a change would provide the contractors the flexibility they need to properly operate their fields.

Requested Tentative Permit Revision:

Remove Section IV.B on page 3 of Attachment I of the Tentative Permit or revise to read: "The Districts shall require their biosolids management contractors that apply Class B biosolids to notify USEPA Region 9 and the applicable Regional Water Board or State Agency by e-mail, within 72 hours after changing application fields, of the new field to which they have moved."

F. Comment Regarding the Implementation of Pollution Prevention Plans

Comment: Language requiring implementation of Pollution Minimization Programs needs to be removed.

Language requiring the Districts to conduct or implement a Pollution Minimization Plan should be removed from the Tentative Permit (see pages 31 and 32) as this language contrary to state law. The words "and conduct" and "and implementation" must be removed in accordance with the SWRCB's precedential order in the Tosco Avon Refinery case, Order No. 2001-06. Under this case, it was found that regional boards lack the authority to require incorporation of or "implementation" of a Pollution Minimization/Pollution Prevention Program in a state-issued permit. See Water Code Section 13263.3(k), which states, "A regional board . . . may not include a pollution prevention plan in an waste discharge requirements or other permit issued by that agency," and Order No. 2001-06 at 38-40 and 60, para. 9 (March 7, 2001), which states, "The Regional Board cannot require in a permit that a discharger implement a pollution prevention plan."

Requested Tentative Permit Revision:

Revise Section VI.C.3.c on pages 31 and 32 to remove the language referring to "and conduct" and "and implementation."

G. Comments Regarding Spill Response

Comment 1: The Tentative Permit should not contain requirements to notify other agencies regarding spills, overflows, and bypasses beyond notifications required by law.

Section VI.C.5.c(2)(a) on Page 35 contains requirements that go beyond state law regarding notification of the State Office of Emergency Services (OES) and the local health agency in the case of spills, overflows, and bypasses. In particular, it requires OES notification for all overflows of 1,000 gallons or more. The Water Code does not require this level of notification; rather it requires notification to OES of overflows of 1,000 gallons or greater only in the case where these overflows reach receiving waters.⁷ Similarly, the Health and Safety Code does not contain the levels of notification required in the permit.

It is inappropriate for the Regional Board to compel reporting to other agencies beyond what is required by the other agencies. Each agency has its own needs for information, and they may or may not coincide with the information needs of the Regional Board. It is not within the purview of the Regional Board to determine such information needs, or to establish reporting requirements for other agencies.

Requested Tentative Permit Revision:

Revise the first sentence of Section VI.C.5.c(1) on page 35 of the Tentative Permit to read: "For spills, overflows or bypasses of 500 gallons or more that has flowed to receiving waters or entered a shallow groundwater aquifer or has public exposure, and all spills, overflows and bypasses of 1,000 gallons or more, the Discharger shall report such spills to the Regional Water Board, ~~the State Office of Emergency Services and the local health agency~~ by telephone or electronically as soon as possible but not later than 24 hours of after knowledge of the incident. Spills, overflows, and bypasses shall also be

⁷ Water Code Section 13271(a).

reported to the State Office of Emergency Services and the local health agency in accordance with state and local laws.”.

Comment 2: Analyzing samples of untreated wastewater released in overflows is unnecessary and could lead to cross-contamination of sampling equipment.

Section VI.C.5.c(2)(c) of the Tentative Permit, on page 35, requires the Districts to make a good faith effort to analyze a grab sample of certain spills and overflows and analyze them for total and fecal coliforms or E. coli, and enterococcus, and “relevant pollutants of concern.” This requirement is unnecessary and could potentially interfere with overflow response efforts. In the event of a wastewater overflow, the first priority of the Districts is to minimize any environmental and human health impacts of the overflow. Initial response efforts are focused solely on stopping the overflow and containing the wastewater. In this situation, it is not the Districts’ priority, nor should it be, to get a sample of the overflow wastewater. Collection of samples of overflowing wastewater is in conflict with the initial goals of the first responders to immediately halt any overflows.

In addition to potentially interfering with overflow response efforts, the requirement to collect samples of untreated wastewater during overflows is unnecessary. The characteristics of untreated wastewater are well established. The Districts conduct routine monitoring of influent at their various wastewater treatment plants, and this monitoring has established typical untreated wastewater constituent concentrations. It is pointless to analyze the constituents in untreated wastewater in every reportable overflow event. For bacteriological sampling, it is also well established that untreated wastewater contains high levels of indicator bacteria. It is not clear what benefit is to be gained from quantifying the specific concentration for each reportable overflow occurrence. Additionally, since untreated wastewater does contain high concentrations of bacteria, collection of such samples could lead to contamination of any receiving water samples that are subsequently collected. The Districts believe that bacteriological sampling of receiving waters, as is required in Section VI.C.5.c(2)(b) of the Tentative Permit, provides more useful information about any potential wastewater overflow impacts.

Requested Tentative Permit Revision:

Delete Section c(2)(c) on page 35 of the Tentative Permit.

Comment 3: Spill reporting requirements in the Tentative Permit do not allow for enough time to prepare reports.

Spill reporting requirements (listed on Pages 34 and 35 of the Tentative Permit) do not allow for sufficient time for quarterly reports to be prepared. Section VI.C.5.c(1) on Page 34 specifies that the required quarterly reports detailing spills, bypasses, and overflows shall be due to the Regional Board fifteen days after the calendar quarter has ended. The reporting requirements for each spill are fairly detailed and as such, the Districts may need more time to prepare any report in case a spill occurs near the end of a calendar quarter (i.e., if a spill occurs December 31, and the reports are due January 15th). The Districts request that a month be allotted for preparation of spill reports after the end of each calendar quarter. This would be consistent with the reporting requirements the Districts must meet for the USEPA (as contained in Paragraph VI of the Modification to Findings of Violation and Order of Compliance issued to the Districts by the USEPA, dated March 9, 2004).

Requested Tentative Permit Revision:

Revise the third sentence of Section VI.C.5.c(1) on page 34 of the Tentative Permit to read: “On the fifteenth first day of January, April, July, and October February, May, August and November (15 days one month after the end of the fiscal quarter) of each year,...”.

H. Comment Regarding Manifold Sampling Requirements

Comment: Given the Districts' manifold and tunnel configuration, it is not possible to have unique sampling points for all four outfalls.

In Table 1 on page E-6 of the MRP, under the heading Effluent Monitoring Station, the Tentative Permit lists four Monitoring Location names and states that:

"This effluent sampling location shall be located at the outfall manifold at Whites Point. Monitoring locations M-002A, M-002B, M-002C and M-002D are for Discharge Serial Nos. 001, 002, 003 and 004, respectively."

The effluent from the JWPCP is conveyed under the Palos Verdes peninsula to the White Point manifold in two tunnels that have multiple cross connections that allow for some mixing. On arrival at the manifold, the effluent from these two tunnels is further mixed before flowing out of the manifold and into the two routinely used ocean outfalls, Discharge Serial Nos. 001 and 002. On the extremely rare occasions that these outfalls are needed, Districts staff open valves at the manifold to allow effluent to flow out of Discharge Serial Nos. 003 and 004. There is no capability to collect samples that would represent only the very small amount of total flow coming into the manifold on these occasions that actually goes to these outfalls. Because the manifold is configured with the 90" (Serial No. 002) and 120" (Serial No. 001) outfall connections at opposite ends of the manifold structure, bracketing the two smaller outfalls, the most representative samples of effluent for these rarely used outfalls can be assigned to the adjacent routinely used sample point. Therefore, we request changes in the manifold sampling locations as indicated below.

Requested Tentative Permit Revision:

Revise language in the Tentative Permit regarding manifold sampling locations as indicated below.

Change Table 1, Monitoring Location Name section on page E-6 of Tentative Permit to read:

"M-002A, M-002B, ~~M-002C, M-002D~~"

Change Table 1, Monitoring Location Description section on page E-6 of Tentative Permit to read:

~~"This~~These effluent sampling stations shall be located at the outfall manifold at Whites Point. ~~Monitoring locations M-002A, M-002B, M-002C and M-002D are for Discharge Serial Nos. 001, 002, 003 and 004, respectively.~~ Samples taken at monitoring location M-002A shall be considered representative of discharges from Discharge Serial Nos. 001 and 003. Samples taken at monitoring location M-002B shall be considered representative of discharges from Discharge Serial Nos. 002 and 004."

Change Title of Item No. IV.A.1 on page E-13 of Tentative Permit to read :

"Monitoring Location (M-001, and Manifold Stations: M-002A ~~through and~~ M-002DB)"

Change First Sentence of Item No. IV.A.1 on page E-13 of Tentative Permit to read:

"The Discharger shall establish ~~a~~ sampling locations representative of ~~at~~ each point of discharge."

Change Fourth Sentence of Item No. IV.A.1 on page E-13 of Tentative Permit to read:

"The chlorine residual and bacteria samples shall be collected at effluent manifold monitoring locations M-002A, M-002B, M-002C and M-002D M-002A and M-002B for Discharge Serial Nos. 001, 002, 003 and 004, respectively. Effluent limitations for chlorine residual and bacteria applicable to discharges through Discharge Serial Nos. 001 and 003, shall apply at manifold

monitoring location M-002A. Effluent limitations for chlorine residual and bacteria applicable to discharges through Discharge Serial Nos. 002 and 004 shall apply at manifold monitoring location M-002B."

I. Comments Regarding Shoreline Microbiological Monitoring and Nearshore/Offshore Water Quality Monitoring

Comment 1: The sampling frequency for Shoreline Microbiological Monitoring is not consistent with its purpose and applicable guidance, and therefore needs to be revised.

The Tentative Permit proposes a minimum sampling frequency for shoreline monitoring of at least five times per week (Table 6, pg. E-28). The proposed frequency is in conflict with all currently applicable guidance for model ocean discharge monitoring and public health monitoring. Combined with the requirement in the permit that all three bacterial indicators (total coliform, fecal coliform, and enterococcus) be measured in each sample, the shoreline program as proposed in the Tentative Permit represents a two-fold increase in required bacteriological monitoring over our current program (6,240 analyses per year under the Tentative Permit versus approximately 3,270 analyses per year under the existing permit). Since this monitoring is expressly to "...provide public health officials with information necessary for the management of beach postings and closures" (pg. E-27), the monitoring frequency should be driven by those needs and designs.

Guidance for public health monitoring is provided by the State Water Resources Control Board's Beach Water Quality Work Group (BWQWG) using a risk-based approach to sampling frequency. This sampling guidance has been incorporated into model ocean discharge monitoring programs for POTWs⁸ and for municipal stormwater systems⁹ within southern California. The guidance is embodied in the following table extracted from Model Monitoring Technical Committee, 2004.

Table 5-2. The Beach Water Quality Workgroup's risk-based approach for determining sampling frequency. The presence of lifeguards is an indicator of high-use beaches that are most likely above the 50,000 users threshold in Assembly Bill 411.

Usage	Likelihood of Contamination			
	High: e.g., stormdrains that flow continuously, frequently exceeding bacterial standards; pier areas	Medium: e.g., stormdrains that flow intermittently or continuously with infrequent exceedances of standards	Low: source nearby, do not expect a problem, stormdrain not flowing but if had a sewage spill it would flow to beach, if a problem it would be long term	No known source
High use beach: lifeguarded, high use surf/diver area	Daily or 5X per week	5X per week	Weekly or 5X per month	Weekly or 5X per month
Accessible sandy beach: low use surf/diver area or other water contact recreation area (wind surfing, kayaking)	2 - 3X per week	Weekly or 5X per month	Weekly or 5X per month	None
Other accessible shoreline: rocky coastline, small coves accessible by trails, private homes limit access	Weekly or 5X per month	Weekly or 5X per month	Monthly or other identification system	None
Inaccessible: beach area > 1 mile from access area	None	None	None	None

⁸ Schiff, K.C., J.S. Brown, and S.B. Weisberg. 2002. Model Monitoring Program for Large Ocean Dischargers in Southern California. Technical Report 357. Southern California Coastal Water Research Project. Westminster, CA. 101 pages.

⁹ Model Monitoring Technical Committee. 2004. Model monitoring program for municipal separate storm sewer systems in southern California. Southern California Coastal Water Research Project, Westminster, CA. 79 pages + Appendices

Table 1 below applies this sampling design to the shoreline monitoring stations along the Palos Verdes Peninsula. The station classifications range from High Use/Low Risk (S5 & S7) to Other Accessible Shoreline/Low Risk (S1). Accordingly, the appropriate sampling frequency for these sites is weekly or five times per month at five sites and monthly sampling at three sites.

Table 1. Classification of Shoreline Monitoring Stations per the BWQWG Sampling Guidance								
	S1	S2	S3	S5	S6	S7	SM	SB
	Long Point	Abalone Cove	Portuguese Bend	White Point	Wilder Addition	Cabrillo Beach	Malaga Cove	Bluff Cove
Summer & Fall	Other Accessible/Low Risk	Life Guarded/Low Risk	Accessible sandy/Low Risk	Life Guarded/Low Risk	Other Accessible/Low Risk	Life Guarded/Low Risk	Other Accessible/Med Risk	Other Accessible/Low Risk
	Monthly	Wkly or 5/Month	Wkly or 5/Month	Wkly or 5/Month	Monthly	Wkly or 5/Month	Wkly or 5/Month	Monthly
Winter & Spring	Other Accessible/Low Risk	Accessible sandy/Low Risk	Accessible sandy/Low Risk	Other Accessible/Low Risk	Other Accessible/Low Risk	Life Guarded/Low Risk	Other Accessible/Med Risk	Other Accessible/Low Risk
	Monthly	Wkly or 5/Month	Wkly or 5/Month	Wkly or 5/Month	Monthly	Wkly or 5/Month	Wkly or 5/Month	Monthly

Based upon daily monitoring at these sites, there has not been a violation of Ocean Plan bathing water standards in 19 years (since 1987). This record reinforces categorization of these sampling sites as low risk.

Besides meeting the requirements of the NPDES permit, the Districts make the shoreline microbiological data available to the Jurisdiction 7 cities subject to the Santa Monica Bay Bacteria Total Maximum Daily Load (TMDL). Under the TMDL, these cities are required to monitor shoreline sites along the Palos Verdes Peninsula on a weekly basis. By sharing these data, duplication of effort is avoided. (This data sharing arrangement is voluntary and should not commit the Districts to any of the provisions arising out of the TMDL.)

Requested Tentative Permit Revision:

The required sampling frequency in the Tentative Permit should be revised to reflect the historical record and conform with the applicable State Board guidance or a burden analysis should be done. To avoid the logistical complications of varying sampling frequencies and to assure that the data also serve the ancillary need of the Jurisdiction 7 cities, the Districts request that the sampling at all sites be revised in Table 6 on page 28 of Attachment E to be weekly.

Comment 2: The Tentative Permit proposes bacterial indicators that are not useful in the context of the Nearshore/Offshore Water Quality Monitoring Program and the sampling design proposed is beyond that needed to confirm compliance of bacteriological Ocean Plan Standards in offshore waters.

The Districts disagree with the utility and purpose of the high level of bacteriological monitoring proposed as part of the quarterly offshore water quality monitoring program (see Tables 11 and 12 on page 32 of Attachment E). In the Tentative Permit, all three bacteriological indicators (total coliform, fecal coliform and enterococcus) are proposed to be analyzed at four depths at 24 sites quarterly. This program, which has not been an element of JWPCP receiving water monitoring in the past, would require 1,152 bacteriological analyses per year. It would also present serious logistical implementation challenges to the Districts, because we currently do not have the capability to conduct bacteriological analyses on our research vessels while at sea. This capability would be required by the proposed bacteriological monitoring requirements in order to meet restrictions on the length of time a sample may be held before being processed.

The expressed purpose of the Nearshore/Offshore Water Quality Monitoring Program is to address the question: "Are Ocean Plan limits for dissolved oxygen (DO) and pH being met?" (Page 29 of Attachment E). Dissolved oxygen and pH profiles are already required in the Tentative Permit on a quarterly basis at 48 sites (Tables 9 and 10 on pages 30 and 31 of Attachment E). The Districts participate in the water quality survey cited in the Tentative Permit, the Central Region Cooperative Water Quality Survey, in coordination with three other POTWs. Bacterial sampling, typically limited to fecal coliforms, has been employed in the past by some of the participants in this survey as a means of identifying and tracking their diluted wastewater fields as they disperse. Ammonia sampling is also used effectively in this role. These tracers aid in the interpretation of other water column measurements directly related to the determination of compliance with Ocean Plan standards for DO and pH. Because the JWPCP disinfects its effluent prior to discharge, the Districts have relied solely on ammonia for tracking their diluted wastewater field. In the case of the White Point outfall system, bacteria will typically be undetectable even within the zone of initial dilution. This conclusion is based upon daily measurements at the White Point manifold of final effluent bacterial levels following disinfection. (These measurements are made for operational purposes only, but provide a direct measure of the bacterial indicator concentrations discharged from the outfalls.) Given the effectiveness of the JWPCP disinfection system and the actual rate of dilution that occurs at the outfalls and beyond as the wastewater field is transported on currents, bacteriological concentrations throughout the water column will be below detection of the analytical methods and useless as a wastewater tracer. Therefore, the Tentative Permit is requiring the Districts to perform 1,152 analyses a year that will yield no information relative to the discharges from JWPCP or the attainment of Ocean Plan pH and DO values. This is contrary to the requirements of Water Code sections 13225(c) and 13267(b), which both require a reasonable relationship between added burden of monitoring and the benefits to be obtained.

Despite the context for the proposed offshore bacterial measurements cited in the Tentative Permit (i.e., determination of compliance with Ocean Plan DO and pH standards), it became apparent at the meeting with Regional Board staff on February 22, 2006 (see agenda in Attachment A) that the staff intended to also use these measurements to confirm compliance with Ocean Plan water contact standards in offshore waters. As was discussed at that time, the scope of the proposed program is considerably beyond what is necessary for that purpose. Demonstration of compliance with water contact and shellfish standards is already required in the Microbiological Monitoring program at six inshore stations that are situated at the outer edge of the kelp beds as "...the area of potential water contact and shellfish harvesting most proximal to the point of discharge" (pg. E-27). This program has been in place in previous permits (since 1988). There have been no exceedances of Ocean Plan Standards for water contact or shellfish at the monitored inshore sites over the past 16 years. Unlike the outer edge of the kelp beds where some SCUBA diving occurs, the frequency of use of the much deeper water further offshore as water contact areas is very low. While recreational users are present in the offshore waters, they are primarily fishing rather than swimming and exposure to the water is incidental, not central, to the activity. Because JWPCP effluent is disinfected prior to discharge and is typically trapped well below the ocean surface, there is little likelihood that water contact standards are exceeded in these offshore waters. This risk of exceedance can be conservatively estimated by considering the results of the daily bacteriological monitoring at the manifold. As described above, these data provide a direct daily measurement of the quantities of bacterial indicators being discharged from the outfall system. When the intentionally very conservative minimum initial dilution of 166:1 is applied to the measured levels of total coliform and enterococcus in the disinfected effluent, calculated exceedances of Ocean Plan or AB411 standards rarely occur. For example, during all of 2004 and 2005, there was only one occasion when application of the initial dilution rate to measured effluent bacterial levels yielded a level that exceeded an AB411 standard (in this case, for enterococcus). Even this single hypothetical exceedance (out of 730 daily manifold measurements during the period) is calculated to occur at the edge of the zone of initial dilution and would not occur elsewhere in the water column. This record, of course, is dependent on a reliable disinfection system. Disinfection at JWPCP is continuous and the disinfection station is fully redundant in tankage and controls and is monitored 24-hours per day by on-site treatment plant operators. The combination of very low water contact exposure and low potential for exceedance due to disinfection suggest that little if any monitoring offshore is justified.

Notwithstanding this record of compliance and the low risk of exceedance described above, the Regional Board may feel that direct measurement of bacterial indicators in offshore waters is necessary to confirm that Ocean Plan standards for water contact are met. In that event, the Districts suggest a sampling program focused on the surface waters at sites overlying the outfalls at which all three indicators (total coliform, fecal coliform, and enterococcus) would be measured monthly. Such a program could be more readily implemented by the Districts, because it could be done in conjunction with current sampling efforts.

Requested Tentative Permit Revision:

The Districts request that the requirement for bacteriological indicators be deleted from the monitoring requirements listed in Table 12, page E-32, and that ammonia continue to be used as a tracer as it has proven to be effective at identifying the JWPCP wastewater field after dispersion and transport.

Comment 3: Clarify that the purpose of shoreline monitoring is for public health, not compliance.

Table 6, Shoreline Microbiological Monitoring Program Requirements (pg. E-28), includes reference in three places to Footnote 1 in the Footnotes for Receiving Water Monitoring Program (pg. E-42). This footnote states that the samples are "... collected for the purpose of demonstrating compliance...". However, the MRP specifically states that the purpose of shoreline monitoring is to address the question, "Are densities of bacteria in the water contact zones below those that ensure public safety?" (pg. E-27) Language in the Tentative Permit should be altered to reflect the actual purpose of the shoreline monitoring.

Requested Tentative Permit Revision:

Delete the reference to Footnote 1 in Table 6, Shoreline Microbiological Monitoring Program Requirements (pg. E-28), or alter Footnote 1 (pg. E-42) to read as follows:

- [1] In addition to reporting the actual concentration of bacterial organisms in each sample collected for the purpose of demonstrating compliance (where applicable), the geometric mean values shall also be determined and reported. The geometric mean values should be calculated using at least five most recent sample results. If sampling occurs more frequently than weekly, all samples during the previous 30-day period shall be used to calculate the geometric mean.

J. Comments Regarding Local Seafood Safety Survey

Comment 1: The Bioaccumulation Monitoring Program should evaluate muscle tissue.

Table 23 (that begins on page 40 of Attachment E), the Seafood Safety Monitoring Requirements, does not identify the tissue that is to be analyzed. This element of the Bioaccumulation Monitoring Program is intended to implement the Santa Monica Bay Restoration Project (SMBRP) Seafood Tissue program. In accordance with the design of this program, the target tissue for seafood safety analysis should be muscle.

Requested Tentative Permit Revision:

Explicitly identify muscle as the tissue to be evaluated under the Seafood Safety Monitoring Program in Table 23 of Attachment E.

Comment 2: Arsenic and selenium should not be included in the Bioaccumulation Monitoring Program.

The Districts disagree with the inclusion of arsenic and selenium as analytes for the Local Seafood Safety Program in Table 23 of Attachment E. As this element of the Bioaccumulation Monitoring Program is

intended to implement the SMBRP Seafood Tissue program, the "...program should focus on only those chemicals in finfish muscle tissue that contribute the most to health risk."¹⁰ (italics as in original). This SMBRP survey design document goes on to stipulate that the program focus on DDTs, PCBs, and mercury, and concludes that "Additional contaminants may be added *if and when evidence warrants*" (emphasis added). As there is currently no evidence that selenium or arsenic are contaminants of concern in local seafood, the expansion of the analyte list is unwarranted under the SMBRP sampling design. In addition, the Montrose Settlements Restoration Program (MSRP)¹¹ conducted an extensive review of fish contaminant data in developing their 2002 Fish Survey analyte list. Existing data on the frequency of occurrence and risk of selenium and arsenic were included in that review. They concluded that there was no evidence that selenium was of concern in the Southern California Bight and that there was not sufficient risk associated with documented arsenic levels to include it in their primary analyte list. Furthermore, based on historical monitoring data, no reasonable potential exists in the JWPCP effluent for these two constituents. Therefore, the analytes for the Local Seafood Safety Survey should be restricted to those recommended in the SMBRP Seafood Safety design: DDTs, PCBs and mercury.

Requested Tentative Permit Revision:

Restrict the analytes for the Local Seafood Safety Survey (listed in Table 23 of Attachment E) to those recommended in the SMBRP Seafood Safety design: DDTs, PCBs, and mercury.

Comment 3: Consideration of relief from targeted fish collecting efforts should apply to all bioaccumulation sampling techniques.

Footnote 10 in the Footnotes for Receiving Water Monitoring Program (pg. E-43) assumes that any fish collected during the course of the Bioaccumulation Program will be collected by means of trawl gear. This is incorrect. Of the six target species stipulated, trawl gear is expected to be the primary sampling means for only hornyhead turbot and white croaker. All other species are most likely to be collected by other means (e.g., hook and line, spear, trap, etc). Because trawling is a non-selective collecting technique, the Districts agree that the effort should be constrained when there is a likelihood that the target species are not present. For species collected by other means, the techniques are more selective and considerable sampling effort may be made without concern for effects on other species. However, there is a possibility that, on occasion, it may prove very difficult or impossible to meet the sampling goals. The language of Footnote 10 on page E-43 needs to be revised to reflect this possibility.

Requested Tentative Permit Revision:

Revise the language of Footnote 10 on page E-43 to read as follows:

[10] Individuals collected for local bioaccumulation trends survey or local seafood safety survey shall be collected during a single season each year to minimize the variability in reproductive state. It may be impossible to collect the required number of fish every year at each zone. For species collected by trawl, if fish of the target size are absent in a given zone, additional trawls need not be attempted. If target fish are present in a given zone, one additional trawl shall be conducted to attempt to collect the necessary number of individuals. For collection efforts using gear other than trawls, the discharger may fail to achieve the sampling goals because of local absence of a target species. In that case, upon request of the discharger, the Executive Officer may approve temporary relief from requirement to collect that species for the survey year. The request for relief must be submitted to the Executive Officer and be accompanied by documented evidence of the sampling effort expended.

¹⁰ SMBRP. 2000. Development of Comprehensive Monitoring Program. Chapter 4. Program Summary: Seafood Safety. Section 4.7.2.3. Targeted Contaminants. Pg 66.

¹¹ Industrial Economics & CH2M Hill. 2002. Montrose Settlements Restoration Program: Fish Sampling Plan. 65 pages. <http://www.darp.noaa.gov/southwest/montrose/pdf/mon-dg2002b.PDF>

K. Comment Regarding Approval and Implementation of Special Studies

Comment: Approval for special studies should be made by the Executive Officer of the Regional Board.

The Model Monitoring Program framework introduces the concept of special studies as a component of POTW receiving water monitoring (pg. E-4). These studies are intended to be the adaptive component of the program, and the adaptive aspect of special studies is central to their utility. The Model Monitoring Program guidance envisions that the questions the special studies address arise naturally from the findings of other components (i.e., local or regional) of the monitoring program. The tentative permit correctly recognizes the adaptive nature of these studies, stating that they are "...by nature ad hoc and cannot be... anticipated in advance of the five-year permit cycle." However, as written, Section I.D.3 requires the Districts to obtain approval from the Regional Board, at a Spring Regional Water Board Meeting, and USEPA prior to implementation of any studies. This approval process is an unnecessarily burdensome constraint on the special studies program that could only delay implementation of special studies. Proposals for scope of work can more efficiently and appropriately be approved by the Executive Officer of the Regional Board.

Requested Tentative Permit Revision:

Revise language in Section I.D.3 on page E-4 to allow authorization for the required special studies to be made by the Executive Officer of the Regional Board.

L. Comment Regarding PCB Analyses

Comment: Measuring PCBs as both Aroclors and congeners is duplicative and unnecessary.

The Districts disagree with the forms in which PCBs are required to be analyzed for the various sample types in the MRP. Under the Tentative Permit, PCB analysis is required in influent, effluent, and receiving water samples (sediment and tissues). In all but influent, both PCB Aroclors (to be summed as Total PCBs) and individual PCB congeners are required analytes in the Tentative MRP. This requirement fails to recognize that the selection of the appropriate form in which to measure PCBs is dependent on the use to which the data will be put. To measure both Aroclors and congeners regardless of sample type or data use is inefficient and imposes an analytical burden as the methods are different. Therefore, measurement of both Aroclors and congeners involves a duplication in analytical effort and costs and would be contrary to the requirements of Water Code sections 13225(c) and 13267(b)..

Aroclors are commercial mixtures of PCB congeners and the forms in which PCBs were distributed and used by industry. Individual congeners appeared as constituents of several different Aroclor mixtures, making the determination of total PCBs from summing Aroclors subject to substantial error. As discussed below, the blending of Aroclor mixtures in effluents and the environment, and the chemical degradation and transformation of the mixtures once in the environment, further compounds the difficulty of using Aroclors as a measure of PCBs. The practice of reporting PCBs as Aroclors in these matrices in the past was a compromise driven by analytical technology and the formerly high cost of congener standards in comparison to the readily available Aroclor standards, not actual suitability to the task of accurate quantification of PCBs in the environment.

For effluent monitoring, the appropriate analytical approach is Aroclor-pattern matching, as Table B of the California Ocean Plan expresses the WQ limit in the form of Aroclors. While this is a historical artifact, reflecting the chromatographic technology existing at the time of the development of water quality objectives, it is the existing standard against which effluents are judged. In addition to this analysis, Regional Board staff assert that congeners should also be measured in the effluent "to facilitate interpretation of sediment/fish tissue data and TMDL development..."(Footnote 10, pg. E-17). This is

based upon the false premise that PCBs are being discharged in the effluent and, therefore, have some relevance to what is seen in the environment. It has been 21 years since the last detection of PCBs in JWPCP inluent, and effluent concentrations are expected to be even lower. In addition, the manufacture and use of PCBs has been banned in the United States for 28 years and there is no expectation that influent concentrations will increase in the future. Since PCBs are absent in the influent and effluent, it does not matter in what form it is measured. PCB sources relevant to our receiving water (sediments and tissues) and to TMDLs are in-place legacy sediments and airborne deposition (direct or indirect through runoff). In this context, there is no interpretive value provided by non-detects of effluent PCBs in alternate forms (i.e., both Aroclors and congeners). The Districts request that effluent monitoring of PCBs be restricted to Aroclors, the form specified in Table B of the Ocean Plan.

The Districts endorse the use of congener analysis for receiving water samples (sediment and tissue) and agree that the 41 specific congeners listed in the MRP are the ecologically relevant analytes. This list of 41 congeners was developed by the PCB Technical Committee of the Southern California Bight Regional Monitoring Program in 1997 for use in subsequent regional surveys of receiving water conditions. The 41 selected congeners are those with the greatest potential toxicity and/or greatest representation in the most widely used Aroclor mixtures (1242, 1248, 1254, and 1260). However, the Districts disagree with the additional requirement that Total PCBs be assessed in sediments and tissues by the summing of Aroclors. The Districts' opinion is based upon the widespread recognition among environmental chemists that little if any PCB in environmental samples is in the form of Aroclors due to biological and chemical weathering and, hence, their quantification in this form is subject to substantial error. For instance, in its April 20, 1997 report¹² to the Bight Regional Steering Committee, the PCB Technical Committee was very critical of the method of quantifying PCB concentrations using Aroclor-pattern matching as historically practiced in chemistry laboratories involved in ocean monitoring in southern California. They found that this method yields large errors since the patterns of PCBs in the field sample deviates greatly from that in any of the Aroclor standards. The utility of Aroclor measurements is limited to detecting presence/absence of PCBs, rough estimates of distribution, tracking recent disposal of PCBs. Only for the last of these uses does Aroclors provide an advantage and addresses a question that is not relevant to the JWPCP receiving water environment. They note that the "PCB pattern mismatch is especially severe in biological tissues due to high degree of selective uptake, metabolism or biodegradation." Among the Technical Committees other findings were: (1) "...as environmental changes render the Aroclor patterns, some data uses (*other than those above*) may be scientifically meaningless" (italicized text inserted) (2) "because toxic potency can be dominated by relatively few congeners, total Aroclor estimates hold little relevance for risk evaluation"; and (3) "any effort to understand mechanisms of transport or degradation in environmental settings can not rely on Aroclor estimates". They concluded that "congener-specific quantification ... yields more precise total PCB concentrations." The subsequent regional surveys in the Bight have assessed total PCBs by congener analysis. In addition, the Montrose Settlements Restoration Program 2002 fish tissue survey, the most comprehensive survey of chlorinated hydrocarbon contamination in coastal fish undertaken in the Bight, employed the same approach to PCB assessment, adopting the PCB Technical Committee list of 41 congeners, rather than Aroclors as analytes. The Districts have also sought the opinion of the OEHHa Fish and Water Quality Evaluation Unit regarding the appropriate form in which to measure PCBs in fish tissues and were advised that congeners are the most relevant and accurate analytes to represent PCBs (R. Brodberg, OEHHa, pers. com, May 2005.) Therefore, because using the sum of congeners provides the most ecologically relevant measure of total PCBs in the Palos Verdes sediment and tissue monitoring program and allows the local levels to be placed in the context of the ongoing regional efforts, the Districts recommend that total PCBs in the receiving water be assessed by sum of congeners, not Aroclors.

Requested Tentative Permit Revisions:

Revise effluent monitoring requirements for PCBs to require only testing for PCB Aroclors, not congeners. In addition, revise receiving water (sediment and tissue) monitoring requirements to require

¹² PCB Tech Comm. April 20 1997. 1997 Study Proposal. Presented to The Steering Committee of the Southern California Bight Pilot Project. SCCWRP. 9 Pgs.

only testing for PCB congeners, not Aroclors. To implement these changes, the following changes should be made:

The definition of PCBs in Attachment A (pg. A-6) should be changed to read as follows:

PCBs (polychlorinated biphenyls) in influents and effluents shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclors-1232, Aroclors 1248, Aroclor 1254 and Aroclor-1260. In receiving water samples (e.g., sediment and tissue) PCBs shall mean PCB congeners whose analytical characteristics resemble, at a minimum, those of PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206, individually quantified and summed as total PCBs.

PCB congeners should be deleted from Table 3 (pg. E13).

Footnote 10 should be deleted from the Footnotes for influent and effluent Monitoring Program (pg. E-17)

Footnote 7 in the Footnotes for Receiving Water Monitoring Program (pg. E-43) should be changed to read as follows:

- [7] Total PCB (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1248, Aroclor 1254, and Aroclor 1260. PCB congeners whose analytical characteristics resemble, at a minimum, those of PCB-18, 28, 37, 44, 49, 52, 66, 70, 74, 77, 81, 87, 99, 101, 105, 110, 114, 118, 119, 123, 126, 128, 138, 149, 151, 153, 156, 157, 158, 167, 168, 169, 170, 177, 180, 183, 187, 189, 194, 201, and 206.

M. Comment Regarding Joint Liability for Receiving Water Violations

Comment: Remove language regarding joint liability for receiving water violations.

On page 23 of the Tentative Permit, Section V Receiving Water Limitations states that:

“Unless specifically excepted by this Order, the discharge, by itself or jointly with any other discharge(s), shall not cause violation of the following water quality objectives. Compliance with these objectives shall be determined by samples collected at stations representative of the area within the waste field where initial dilution is completed.”

The Districts are unaware of any legal authority under state or federal law that imposes joint and several liability for unrelated wastewater dischargers, and ask that the Regional Board identify where the authority for this requirement in Section V of the Tentative Permit can be found. This concern is highlighted by the fact that the Regional Board is responsible for issuing individual control mechanisms (e.g., permits) to dischargers to independently meet water quality standards with the intention that this integrated program will insure overall protection of water quality. Moreover, an individual discharger does not have the authority or the ability to control another discharger, and hence it is not clear how this requirement could even be effectuated by the Districts if another discharger violated a water quality objective.

Furthermore, in the tentative permit under special provision C(1)(i) it states: “[t]he waste discharged shall not cause a violation of any applicable water quality standard for receiving waters.” This requirement by itself is more than sufficient to ensure that receiving waters are protected and water quality objectives are attained.

Requested Tentative Permit Revision:***Revise Section V Receiving Water Limitations as indicated below.*****Section V Receiving Water Limitations**

Unless specifically excepted by this Order, the discharge, ~~by itself or jointly with any other discharge(s)~~, shall not cause violation of the following water quality objectives. Compliance with these objectives shall be determined by samples collected at stations representative of the area within the waste field where initial dilution is completed.

N. Comment Regarding Stringency of the Effluent Limitations

Comment: The Regional Board must consider Water Code Section 13241 factors, including economics, when effluent limitations are more stringent than those required under federal law.

Finding II.N on page 9 of the Tentative Permit and Section III.C.5 on page F-13 of the Fact Sheet state that:

“Stringency of Requirements for Individual Pollutants. This Order contains restrictions on individual pollutants that are no more stringent than required by the federal CWA. Individual pollutant restrictions consist of technology-based restrictions and water quality-based effluent limitations. The technology-based effluent limitations consist of restrictions on biochemical oxygen demand (BOD), total suspended solids (TSS), and hydrogen ion concentration (pH). Restrictions on BOD, TSS and pH are specified in federal regulations as discussed in Finding F, and the permit’s technology-based pollutant restrictions are no more stringent than required by the CWA. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. All beneficial uses and water quality objectives contained in the Basin Plan and the Ocean Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless “applicable water quality standards for purposes of the CWA” pursuant to 40 CFR 131.21(c)(1). Collectively, this Order’s restrictions on individual pollutants are no more stringent than required to implement the technology-based requirements of the CWA and the applicable water quality standards for purposes of the CWA.”

The Districts disagree with this finding inasmuch as the Tentative Permit includes a number of requirements that are more stringent than CWA technology-based and water quality-based requirements. For example, the Tentative Permit contains numeric effluent limitations, daily limits, and mass limits, which are not required by federal law.¹³ The permit contains mass emission effluent limitations based on the JWPCP’s 1997 design flow rather than the current design flow. This application is based on anti-backsliding requirements; however, the permit does not recognize the exceptions to the general rule against backsliding, which allows for less stringent limits under federal law.¹⁴ The Tentative Permit also contains technology-based effluent limitations more stringent than federal requirements. The effluent limitations are based on Table A in the Ocean Plan, which includes limitations for oil and grease, settleable solids, and turbidity. Limitations for these three parameters are not included in the federal

¹³ See e.g., 40 C.F.R. Section 122.44(d) and (k)(3) and Sections 122.45(d)(2) and (f)(1); see also *Communities for a Better Environment v. State Water Resources Control Board* (2003) 109 Cal.App.4th 1089, reh’g. den., 2003 Cal.App. LEXIS 1082 (1st. Dist. June 27, 2003), cert. den., 2003 Cal. LEXIS 7251 (Sept. 24, 2003).

¹⁴ CWA Section 402(o) and Section 303(d)(4), and 33 U.S.C. Sections 1342(o)(2) and 133(d)(4).

secondary treatment standards, and thus are more stringent than required by federal law.¹⁵ In addition, the Tentative Permit contains effluent limitations for radioactivity based on drinking water standards, even though ocean waters are not designated as sources of municipal drinking water supply, rather than the requirements for radioactivity in the Ocean Plan. The Regional Board should evaluate if any other limitations fall into this category.

In April 2005, the California Supreme Court made an important ruling with regard to whether a regional board is required to take the reasonableness factors contained in Water Code section 13241 into account when issuing effluent limitations. The Court ruled that, when a regional board proposes pollutant restrictions in a wastewater discharge permit *more stringent* than federal law requires, California law requires the regional board to take into account the factors set forth in Water Code Section 13263, including the incorporated factors in Section 13241 and economic factors (i.e., the wastewater discharger's cost of compliance).¹⁶

Consequently, since the Tentative Permit contains effluent limitations that are more stringent than federal law, the Regional Board is required to conduct an analysis of these limits under Water Code Section 13263, including the factors contained in Section 13241. In addition, the Regional Board must revise Permit Finding II.N and Fact Sheet Section III.C.5 to reflect that the permit contains restrictions that are more stringent than required by the federal CWA, and to include the results of the Regional Board's analysis related to Water Code Sections 13263 and 13241.

Requested Tentative Permit Revision:

Conduct an analysis of effluent limits that are more stringent than required by federal law, per Water Code Section 13263, including the factors contained in Section 13241. In addition, revise Permit Finding II.N and Fact Sheet Section III.C.5 to reflect that the permit contains restrictions that are more stringent than required by the federal CWA, and to include the results of the Regional Board's analysis related to Water Code Sections 13263 and 13241.

O. Comment Regarding Liability for Violations of Monthly and Weekly Effluent Limitations

Comment: Language related to liability for violations of monthly and weekly effluent limitations needs to be removed or changed.

The Regional Board has included language in Section III of the Tentative Permit related to compliance with average monthly effluent limitations (Section III.C on page 36) and compliance with average weekly limitations (Section III.D on page 37). Section III.C Average Monthly Effluent Limitation (AMEL) states that:

"If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month."

Section III.D Average Weekly Effluent Limitation states that:

¹⁵ 40 C.F.R. Section 133.102. These regulations describe the minimum level of effluent quality attainable by secondary treatment in terms of the parameters—BOD₅, suspended solids, and pH.

¹⁶ City of Burbank v. State Water Resources Control Board., 35 Cal.4th 613, 628 (April 4, 2005).

“If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.”

USEPA Region IX has commented to at least one regional water board that it is inappropriate to include blanket statements within permits that attempt to predetermine violations of the Clean Water Act or the NPDES permit.¹⁷ The compliance determination language proposed improperly prejudices where an exceedance equates to permit non-compliance and predetermines how many days of non-compliance will be found. This prejudgment ignores potential defenses to permit exceedances and is legally improper particularly when the Mandatory Minimum Penalties (MMP) program does not find every exceedance to be a “violation” and does not find 31 or seven “violations” from 31 or seven days of exceedances, but merely one violation.¹⁸ Further, the date of the sample generally only indicates a violation on the date of the data collection and other evidence is required to demonstrate that violations occurred on more than one day.¹⁹

Specifically, the Districts believe that the use of the phrase “will be considered out of compliance” (specifically the word “will”) for an “alleged” violation prejudices whether a violation has occurred or not since there may be an affirmative defense for the exceedance. The Districts believe the word “may” is a better choice since it indicates that enforcement discretion exists. We also believe that other changes may be appropriate for the language to be consistent with the State Board’s Enforcement Policy.

Inasmuch as these sections of the Tentative Permit deal with compliance determination procedures for non-daily limits, the Districts believe that, if not removed entirely, the proposed language should be revised to explicitly distinguish between procedures for discretionary and mandatory penalties in accordance with state and federal law. If the Regional Board chooses to assess discretionary administrative civil liability for violations of a monthly average it must determine whether an exceedance of a violation of a monthly average represents thirty days of violations for a 30-day month in order to be consistent with the Clean Water Act and whether mitigations factors should apply.^{20,21} For purposes of complying with the mandatory penalty provisions in the Water Code, if based on one or more monitoring data points in a month the Regional Board determines that the discharger has violated a monthly average effluent limitation, then the Regional Board should consider that to be only one violation.²² The same approach would apply for a violation of an average weekly limitation.^{23,24} Because these are policy considerations, and not regulatory requirements, this language should not be included in a discharge permit.

¹⁷ See letter from EPA commenting on Tentative Order No. R9-2005-0136 and R9-2005-0137 (Aug. 3, 2005).

¹⁸ Water Code Section 13385(i); State Water Resources Control Board, *Water Quality Enforcement Policy* at 22 (Feb. 19, 2002); SWRCB SB709 Questions & Answers Document at p. 15, Q.39 (April 17, 2001)(if “the discharger has violated a monthly average effluent limitation, the Regional Board should consider that one violation.”).

¹⁹ SWRCB SB709 Questions & Answers Document at p. 13, Q.35 (April 17, 2001).

²⁰ SB 709 AND SB 2165 QUESTIONS AND ANSWERS, April 17, 2001, State Water Resources Control Board; Water Code Section 13385(e); 33 U.S.C. 1319(d).

²¹ As written under the Tentative Permit, a single violation of a monthly average limit at \$32,500 per day, multiplied by 31 days would be over a million dollars (\$1,007,500); Tyson Foods, 897 F.2d at 1139. Also see, Gwaltney, 897 F. 2d at 314.

²² SB 709 AND SB 2165 QUESTIONS AND ANSWERS, April 17, 2001, State Water Resources Control Board.

²³ As written under the Tentative Permit, a single violation of weekly average limit at \$32,500 per day, multiplied by 7 days would be \$227,500; Tyson Foods, 897 F.2d at 1139. Also see, Gwaltney, 897 F. 2d at 314.

²⁴ SB 709 AND SB 2165 QUESTIONS AND ANSWERS, April 17, 2001, State Water Resources Control Board.

Requested Tentative Permit Revisions:

Remove the compliance determination language, or at least make the language changes listed below to Sections III.C and III.D of the Tentative Permit.

Section III.C

~~If the~~ The average of daily discharges over a calendar month will be reviewed to determine whether the result exceeds the AMEL for a given parameter. If exceeded, an alleged violation will be flagged and the Regional Board will consider appropriate informal or formal enforcement actions in accordance with the State Water Resources Control Board's Water Quality Enforcement Policy. If the Regional Board chooses to assess discretionary administrative civil liability for violations of an AMEL, the discharger will ~~may~~ be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the discharger will be considered out of compliance for that calendar month. For purposes of complying with the mandatory penalty provisions in the Water Code, if the Regional Board determines that the discharger has violated an AMEL based on one or more monitoring data points in a month, the Regional Board will consider that one violation. In addition, under the Water Code, a single operational upset in a wastewater treatment unit that treats wastewater using a biological treatment process shall be treated as a single violation, even if the operational upset results in violations of more than one effluent limitation and the violations continue for a period of more than one day. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

Section III.D

~~If the~~ The average of daily discharges over a calendar week will be reviewed to determine whether the result exceeds the AWEL for a given parameter. If exceeded, an alleged violation will be flagged and the Regional Board will consider appropriate informal or formal enforcement actions in accordance with the State Water Resources Control Board's Water Quality Enforcement Policy. If the Regional Board chooses to assess discretionary administrative civil liability for violations of an AWEL, the discharger will ~~may~~ be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the discharger will be considered out of compliance for that calendar week. For purposes of complying with the mandatory penalty provisions in the Water Code, if the Regional Board determines that the discharger has violated an AWEL based on one or more monitoring data points in a week, the Regional Board will consider that one violation. In addition, under the Water Code, a single operational upset in a wastewater treatment unit that treats wastewater using a biological treatment process shall be treated as a single violation, even if the operational upset results in violations of more than one effluent limitation and the violations continue for a period of more than one day. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

P. Comment Regarding the Applicability of the Sources of Drinking Water Policy

Comment: Resolution No. 88-63 does not apply to discharges from JWPCP.

Finding II.H on page 7 of the Tentative Permit states that:

“Water Quality Control Plans. The Regional Water Board adopted a revised *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assigns the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan. Beneficial uses applicable to the Pacific Ocean (Point Vicente Beach, Royal Palms Beach, and Whites Point Beach) in the Palos Verdes Peninsula are as follows:”

Resolution No. 88-63 is the Sources of Drinking Water Policy that applies to water bodies with beneficial uses designated as suitable, or potentially suitable, for municipal or domestic water supply (MUN). Since this discharge is to ocean waters this reference is inapplicable and the Districts request that it be struck from the Tentative Permit.

Requested Tentative Permit Revision:

Revise Finding II.H on page 7 of Tentative Permit to read as indicated below.

“Water Quality Control Plans. The Regional Water Board adopted a revised *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. ~~In addition, State Water Resources Control Board (State Water Board) Resolution No. 88-63 requires that, with certain exceptions, the Regional Water Board assigns the municipal and domestic supply use to water bodies that do not have beneficial uses listed in the Basin Plan.~~ Beneficial uses applicable to the Pacific Ocean (Point Vicente Beach, Royal Palms Beach, and Whites Point Beach) in the Palos Verdes Peninsula are as follows:”

Q. Comment Regarding Antidegradation Analysis for Permit Re-issuance

Comment: Language regarding use of mass emission benchmarks to perform antidegradation analyses should be amended.

Permit Finding II.T on pages 10 and 11 of the Tentative Permit and Section IV.G on page F-28 and F-29 of the Fact Sheet state that:

“Mass Emission Benchmarks. To address the uncertainty due to potential increases in toxic pollutant loadings from the JWPCP discharge to the marine environment during the five-year permit term, and to establish a framework for evaluating the need for an antidegradation analysis to determine compliance with State and federal antidegradation requirements at the time of permit reissuance, 12-month average mass emission benchmarks have been established for effluent discharged through Discharge Serial Nos. 001 and 002 (see MRP – Attachment E). These mass emission benchmarks are not enforceable water quality based effluent limitations. They may be re-evaluated and revised during the five-year permit term. The methodology for calculating mass emission benchmarks is described in the Fact Sheet (Attachment F).”

The Districts are concerned that the language in the first sentence related to “uncertainty due to potential increases in toxic pollutant loadings from the JWPCP discharge to the marine environment during the five-year permit term” may contradict findings made in the permit that the discharge is in fact consistent with federal and state antidegradation requirements.²⁵ In addition, while this information may be useful to the Regional Board in some manner at the time the next permit is issued for the JWPCP, it is debatable if this information establishes “a framework” for conducting a prospective antidegradation analysis. That language implies that a methodology for antidegradation analysis is being established rather than simply collecting information on plant performance, similar to the rationale used to establish performance goals in the Tentative Permit²⁶

Moreover, the utility of the information to be collected as part of this proposed permit program deserves further scrutiny since mass emission data are intrinsically variable. Table 5 in the “Characteristics of effluents from large municipal treatment facilities between 1998 and 2000,” an article contained in the Southern California Water Research Project Biennial Report 2001-2002 provides mass emission data from four large southern California POTWs (Hyperion Treatment Plant, JWPCP, Orange County Sanitation Districts’ Treatment Plant #2, and Point Loma Wastewater Treatment Plant). The data show statistically minor variations in mass emission loads at these POTWs over a period of years. For example, copper has varied slightly over the past 13 years. In 1991, the combined POTW copper load was 47 metric tons (mt), but fluctuated from 49 mt in 1996, to 59 mt in 1997, 55 mt in 1998, 46 mt in 1999 and 51 mt in 2000. If a party had reviewed these data in 1998, one might have concluded that potentially some degradation had occurred in the previous years since the mass loadings seemed to be increasing. However, reviewing the data from subsequent years shows a drop in copper loadings. This condition illustrates the need to recognize the statistical variability of discharge data, which must be considered when assessing whether a discharger maintains its treatment level and effluent quality. Accordingly, the Districts request that language regarding Permit Finding II.T and Section IV.G of the Fact Sheet be changed.

Requested Tentative Permit Revision:

Revise language in Permit Finding II.T and Section IV.G of the Fact Sheet as indicated below.

“Mass Emission Benchmarks. To address the uncertainty due to potential increases relative changes in toxic pollutant loadings from the JWPCP discharge to the marine environment during the five-year permit term, and to collect information that could be used establish a framework for evaluating the need for an antidegradation analysis to determine compliance with State and federal antidegradation requirements when a subsequent at the time of permit is re-issued to the JWPCP reissuance, 12-month average mass emission benchmarks have been established for effluent discharged through Discharge Serial Nos. 001 and 002 (see MRP – Attachment E). These mass emission benchmarks are not enforceable water quality based effluent limitations. They may be re-evaluated and revised during the five-year permit term. The methodology for calculating mass emission benchmarks is described in the Fact Sheet (Attachment F).”

R. Comment Regarding the Statute of Limitations on Enforcement Actions

Comment: References to potential enforcement actions should includes references to the statute of limitations.

²⁵ “... the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution 68-16.” [see Permit Finding II.O on page 9-10 of the Tentative Permit]

²⁶ “This approach is consistent with the antidegradation policy in that it requires the Discharger to maintain its treatment level and effluent quality, recognizing normal variations in treatment efficiency and sampling and analytical techniques.” Fact Sheet Section IV.E on page F-27.

The Tentative Permit at Page 1, under Table 3, states that Order No. 97-090 will be rescinded "except for enforcement purposes." This reservation of enforcement authority is not without temporal limitation. There are applicable statutes of limitation that would apply in this case to prevent enforcement beyond the statutorily-limited timeframe.

The Code of Civil Procedure (C.C.P.) at section 338(i) sets forth a three-year statute of limitations for commencing an action under the Porter Cologne Water Quality Control Act (Division 7, commencing with Section 13000) of the Water Code. Under this statutory provision, a cause of action shall not be deemed to have accrued until the discovery by the regional board of the facts constituting grounds for commencing actions under their jurisdiction. Since the state law authorizing administrative enforcement is contained in Division 7 of the Water Code, in Section 13385, the three-year statute of limitations would apply to any proposed enforcement action.

Similarly, under the federal Clean Water Act, for USEPA and citizen enforcement, there is a five-year statute of limitations, so no enforcement could occur for any violations that occurred more than five years before the effective date of the new permit.²⁷ Therefore, the Tentative Order should be amended to state that the previous permit is rescinded "except for enforcement allowed under the applicable statutes of limitation."

Requested Tentative Permit Revision:

At page 1, under Table 3, revise language to state that the previous permit is rescinded "except for enforcement allowed under the applicable statutes of limitation."

S. Comments Regarding the Findings and the Compliance Summary

Comment 1: The Districts have an excellent record of preventing wastewater overflows when compared with other California municipalities on a per-mile-of-pipe basis.

The Compliance Summary in the Fact Sheet, at page F-10, states, "Since 1997, the Districts have reported numerous spills or overflows in the JWPCP service areas." While the Districts have experienced wastewater overflows in the JWPCP service area, there have been relatively few events given the number of miles of sewer tributary to the JWPCP. The primary goal of the Districts' sewer maintenance program has been and will remain the protection of human health and the environment. Wastewater overflows are generally prohibited by both state and federal regulations, and moreover, are inconsistent with the Districts' goal of providing the highest level of service to the public. The Districts have always placed high priority on capacity assurance, repair and replacement, and proper operation and maintenance of its sewerage system. In fact, in the last three fiscal years (2002-2003, 2003-2004, and 2004-2005), only 43 reportable spills have occurred despite the fact that there over 1,320 miles of trunk sewer maintained by the Districts (1,200 of which are in the JOS). Of the 43 reportable spills over the last three years, 25 were caused by high intensity rainfall, which is beyond the Districts' control. Thus, in the last 3 years, the Districts have experienced only 18 reportable spills caused by a factor other than high intensity rainfall. Taking into account 1,320 miles of trunk sewer, which is equivalent to about ½ a spill for every 100 miles of maintained sewer. The City of Oakland, California reported an average of 28 spills per 100 miles of sewer recently.²⁸ The average spill rate for southern California municipalities is 5 spills per 100 miles, whereas the City of Los Angeles maintains an approximate rate of 10 spills per every 100 miles.²⁹

²⁷ 28 U.S.C. Section 2462, which states, "Except as otherwise provided by Act of Congress, an action, suit or proceeding for the enforcement of any civil fine, penalty, or forfeiture, pecuniary or otherwise, shall not be entertained unless commenced within five years from the date when the claim first accrued..."

²⁸ From USEPA webpage:

<http://yosemite.epa.gov/opa/admpress.nsf/b0789fb70f8ff03285257029006e3880/fac86fde9a9dc08852570d8005e1634!OpenDocument>

²⁹ From USEPA webpage:

<http://yosemite.epa.gov/opa/admpress.nsf/b0789fb70f8ff03285257029006e3880/a2971dcb017eee53852570d8005e1532!OpenDocument>

Requested Tentative Permit Revision:

Revise the language in the Compliance Summary on page F-10 to read: "In accordance with applicable permits, the Districts have reported a number of spills and/or overflows in the JOS service area over the years. In the last three fiscal years, 43 spills were reported in all sewers maintained by the Districts, many of which were caused by high intensity rainfall in the area. Excluding spills caused by rainfalls (which are outside of the Districts control), the Districts averaged only ½ reportable spill per every 100 miles of sewer maintained over this three-year period, as compared to an average spill rate for Southern California municipalities of approximately 10 spills per every 100 miles."

Comment 2: The Clean Water Act does not prohibit backsliding but rather restricts it to certain circumstances.

A finding in the Tentative Permit (Finding P of page 10) which reads: "[s]ections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(I) prohibit backsliding in NPDES permits..." is not correct. In actuality, the CWA does not prohibit backsliding, it restricts backsliding in NPDES permits to certain instances where exceptions are not present.

Requested Tentative Permit Revision:

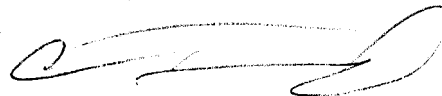
Replace the word "prohibit" with "restrict" in the first sentence of Finding P on page 10 of the Tentative Permit.

In addition to the comments contained in this letter, verbal and written comments were made to Regional Board staff at a February 22, 2006 meeting. A copy of the agenda for that meeting is included in Attachment A, along with a written list of additional requested changes to the Tentative Permit. It is the Districts' understanding, based on discussions at this meeting and later discussions with Regional Board staff, that it is the intent of the Regional Board to make several revisions to the Tentative Permit based on the February 22, 2006 meeting. If the Regional Board chooses not to make these revisions, we would appreciate the opportunity to make further written comments on these issues. Finally, as stated above, all documents referenced within these comments are hereby incorporated by reference. Copies of any reference documents can be provided upon request.

The Districts thank you in advance for your careful consideration of these comments. If you have any questions concerning this letter or need additional information, please contact the undersigned at (562) 699-7411, extension 2803.

Very truly yours,

James F. Stahl



Ann Heil
Supervising Engineer
Treatment Plant Monitoring Group
Technical Services Department

AH:drs
Attachments

ATTACHMENT A

**LACSD and RWQCB Meeting on Tentative JWPCP NPDES Permit
Agenda
February 22, 2006**

Issues/Concerns

1. Calculation of Mass Emission Limitations
2. Bacteriological Monitoring and Reporting
3. Representative Sample Locations for Discharge 003 and 004
4. Compliance with Receiving Water Limitations Jointly with Other Dischargers
5. Legal Use of Pesticides in the Tributary Area
6. Sewage Spill Reporting
7. Reasonable Potential
8. Accelerated Toxicity Monitoring Initiation

Other Concerns/Needed Clarifications:

1. 2,4,6 Trichlorophenol Limit for Discharge 004?
2. Applicability of Daily Maximum and Instantaneous Maximum Limitations
3. Bypass Provisions
4. Availability of Chlordane Standards
5. Habitat Variables
6. Local and Regional Seafood Safety Surveys
7. Timing of Annual Monitoring and Full Priority Pollutant Scan
8. Ocean Plan Version
9. Typographical Errors?

Listing of Potential Typographical Errors and Minor Language Issues

Throughout	The Hyperion permit contained references to the Regional Board and USEPA. This was picked up in this permit, however, references to USEPA should be removed as they are not applicable.
Page 1	The Permit's effective date is incorrect, it should be 50 days after adoption.
Page 7	Section H, should delete the second sentence referencing Resolution No. 88-63 (Sources of Drinking Water Policy), as this addresses municipal water supply uses and it is inapplicable to discharges to the ocean.
Page 9	Section N, omit "scientifically" from the 5th sentence. Water quality-based effluent limitations have not been scientifically derived.
Page 10	Section P, change "prohibit" in first sentence to "restrict" or "limit." The CWA does not prohibit backsliding in NPDES permits, rather it restricts or limits backsliding to several defined circumstances.
Page 12	B.1. Omit the last sentence. Effluent limitations are limits, which if exceeded constitute a violation. It is unnecessary to add that the discharge in excess of effluent limitations is prohibited.
Page 12	The monthly average effluent <u>dry weather</u> discharge flow rate from the Facility shall not exceed 400 mgd.
Page 14	Ammonia performance goal is 36 ug/L should this be 36 mg/L?
Page 14	Chlorine limits are inconsistent with the calculated limits on page F-21.
Page 17	Spawning is misspelled "spawing" 3 times in Table 6 (page 17) and 3 times in Table 4 of attachment F.
E-14	E-14 Effluent Monitoring Program. We are currently directed by RWB to use membrane filtration method SM 9230C (mE/EIA) for enterococcus. Units should be reported as CFU/100mL not CFU.
E-14	E-14 Effluent Monitoring Program. Total and Fecal Coliforms units are listed as MPN/100mL. We are currently reporting total and fecal coliform data as CFU/100mL by membrane filtration methods SM 9222 B & 9222E. The 1997 permit uses #/100ml. Changing this to the MPN test would require 4-day delay in results. We recommend that these units be removed to allow flexibility in the method, consistent with Page 23.
E-28	VI.A.1. Shoreline Monitoring. Table 6. Fecal Coliform. Footnote 3 (pg E-42) is not applicable to shoreline monitoring. Shoreline monitoring is for public health purposes and all three indicators are required per AB411.
E-35	Table 17, is titled "Sediment Chemistry Monitoring Requirements" but the units listed in the table are listed as mg/L or ug/L. The appropriate units for sediment chemistry are /Kg.
E-38	VI.D.2. Regional Demersal Fish and Invertebrate Survey. In the list of activities replace "Infaunal sample analysis" with "Trawl sample analysis"
E-49	E-49 Figure 1. Shoreline Monitoring Stations. SM and S7 have no labels should these be Malaga Cove and Cabrillo Beach?
E-50	E-50 Figure 2. Inshore Monitoring Stations. IL7 has no label. Should this be Cabrillo Beach?
F-6 thru F-10	In Table 3 of Attachment F, minimum is misspelled "minmum" 5 times in column 6.
F-6 thru F-10	In Table 3 of Attachment F, 2-methyl-4,6-dinitrophenol is misspelled "...dihitro...", butylbenzyl phthalate is misspelled "bytl...", chloroethane is misspelled "chlocoethane", and 4-bromophenyl phenylether is misspelled "4-brompphenyl..."